

805 KAR 4:030. Seismograph measurements.

RELATES TO: KRS 351.330

STATUTORY AUTHORITY: KRS Chapter 13A, 351.335

NECESSITY, FUNCTION, AND CONFORMITY: KRS 351.330 requires the Department for Natural Resources to limit ground vibrations. This administrative regulation effects the provisions of that law.

Section 1. (1) If a blaster decides that the table of maximum pound per delay established in 805 KAR 4:020 is too conservative, he may use seismograph measurements and increase the charge per delay period, provided the velocity of two (2) inches per second limit is not violated. He must use the seismograph on every shot thereafter so long as the table is not being complied with.

(2) If a blaster considers the table too conservative for his particular area, he may, upon submission of seismograph reports, petition for a modified table for blasting operation at that particular site but in no case shall the department allow a table that would permit velocities above the two inch per second limit on structures imposed by KRS 351.330.

(3) In making a seismograph determination of the velocity at a particular position, the following formula shall be used:

$$V = V_o (D_o/D)^{1.5}$$

Where V_o is the maximum ground particle velocity at the seismograph, D_o is the distance of the seismograph from the blast, and D is the distance from the blast to the position in question and in the same general direction. The distance D_o may not be greater than D , and D cannot be more than five (5) times D_o . This determined velocity at the site of any dwelling house, public building, school, church, commercial or institutional building shall not exceed the two (2) inches per second limit.

(4) If special conditions occur which indicate that abnormal or potentially damaging ground vibrations may result from blasting, the department may require a seismograph recording of any or all blasts. (E&B-M&M-3; 1 Ky.R. 1073; eff. 7-2-1975; 4 Ky.R. 301; eff. 5-3-1978; 17 Ky.R. 3264; eff. 6-26-1991; TAm eff. 8-9-2007; Crt eff. 6-27-2018.)